

## **ABSTRACT OF THE DISCLOSURE**

**[0042]** The invention is a switched-matrix output for a multi-channel stimulator. The switch-matrix output system uses groups of switches connectively placed between N number of digital-to-analog convertors (DACs) and M electrode contacts to permit fewer, space-consuming DACs to be used in an implantable stimulator, thereby saving internal stimulator space. One embodiment of the switched matrix output uses switches to activate only one active-electrode subset of M electrode contacts at any one time, so that the total number of DACs contained in the stimulator can be less than the M total number of electrode contacts.